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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/553,096	09/15/2006	Stephen Privett	P07342USD	6624
22885 7590 10/06/2009 MCKEE, VOORHEES & SEASE, P.L.C. 801 GRAND AVENUE SUITE 3200 DES MOINES, IA 50309-2721				
EXAMINER				
PAUL, DISLER				
ART UNIT		PAPER NUMBER		
2614				
NOTIFICATION DATE		DELIVERY MODE		
10/06/2009		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patatty@ipmvs.com

### Office Action Summary

**Application No.**

10/553,096

**Applicant(s)**

PRIVETT, STEPHEN

**Examiner**

DISLER PAUL

**Art Unit**

2614

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11 September 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SE/US)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

1. *The applicant's amended claim (1) as wherein "the amplifier arrangements are respectively located in different rooms of a premises" have been further analyzed and now rejected over new prior art as in Beer et al. (US 7,092,530 B1).*

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-2, 4, 8 are rejected under 35 U.S.C. 102(a) as being anticipated by Kemmerer et al. (US 2003/0123678 A1) and Sato (US 4,380,809) and Beer et al. (US 7,092,530 B1).

Re claim 1, Kemmerer et al. disclose of a distributed audio system including at least one speaker, a power supply and, intermediate said power supply and at least one speaker there is provided an amplifier arrangement (fig.1 (1-2,Battery,4); par [0026-0027]/speaker and power supply and also having amplifier arrangement in between the speaker and power supply); comprising an audio input, an audio output, a switching regulator and a switching

amplifier(fig.2(2;4; 42; 44); par[0033-0035]/audio input and switching regulator and switching amplifier), wherein the switching regulator is arranged to receive a variable DC electrical input from a power supply and output a substantially constant voltage to the switching amplifier, said power supply being arranged remotely of said amplifier arrangement (fig.2(41-42;44); par[0036,0059,0029]) and wherein said system is configured so that the said power supply is connected to an amplifier arrangement (fig.2(2;4); par [0031]/power supply as being connected to an amplifier arrangement).

However, Kemmerer et al. fail to disclose of the specific wherein the power supply is connected to the amplifier arrangements via respective electrical cable. But, Sato disclosed of a system wherein similar concept of the power supply is connected to an amplifier arrangement via respective electrical cable (fig.1 (B; 1-2, 13) with cable (16) for interconnection of power supplies to amp & col.2 line 40-60). Thus, taking the combined teaching of Kemmerer et al. and Sato as a whole, it would have been obvious for one of the ordinary skill in the art to have modified Kemmerer et al. with the power supply is connected to an amplifier arrangements via respective electrical cable for providing electrical connection to put system into operation.

Although, the combined teaching of Kemmerer et al. and Sato as a whole, disclose of providing the amplifier placed at a location (Kemmerer; fig.3A; par [0002-00037; 0039]/the amplifier provided in a vehicular location). But, they never specific such arrangements as being

plurality of amplifier arrangements and wherein said amplifier arrangements are respectively located in different rooms of a premises.

But, Beer et al. disclose of an amplifier system in a vehicle wherein the similar concept of having the arrangements as being plurality of amplifier arrangements and wherein said amplifier arrangements are respectively located in different locations of a premises (fig.1 (5-6); col.1 line 27-30; col.2 line 6-20/separate amplifiers for different audio frequencies as placed in different locations in the vehicle premises) for avoiding harmonic distortions and audible clicks and pops with the separating amplifiers. Thus, it would have been obvious for one of the ordinary skills in the art to have modified the combined prior arts with implementing the arrangements as being plurality of amplifier arrangements and wherein said amplifier arrangements are respectively located in different locations of a premises for avoiding harmonic distortions and audible clicks and pops with the separating amplifiers.

It would have been obvious for one of the ordinary skills in the art to have tried in modifying such amplifier arrangements as being located in different locations of the premises with further implementing such amplifier arrangements are respectively located in different rooms of a premises with no unexpected result based on obvious variation of engineering design so as to similarly avoid harmonic distortions and audible clicks and pops with the separating amplifiers.

Re claim 2, the audio system according to claim 1, wherein the switching amplifier is a digital amplifier (fig.1 (2); par [0031]).

Re claim 4, audio system according claim 2, wherein the circuitry of either the switching regulator and/or the switching amplifier is constructed of discrete components (fig.2 wt (2a,2b,2c); par[0059]).

Re claim 8, the audio system according to claim 1, wherein the power supply is connectable to the remote amplifier arrangement via a wire (fig.1-2; par [0029]), However, the combined teaching of Kemmerer et al. and Sato and Beer as a whole, fail to disclose of the specific wherein the connection of the power supply and amplifier varies in length between a preselected maximum e.g. 50 m, and a preselected minimum, e.g. 1 m.. However, it is noted the concept of having the specific length of between a preselected maximum e.g. 50 m, and a preselected minimum, e.g. 1 m. is merely an obvious variation of engineering choice based on his need with no unexpected result for similarly for providing power to the entire digital amplifier.

4. Claims 5-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kemmerer et al. (US 2003/0123678 A1) and Sato (US 4,380,809) and Beer et al. (US 7,092,530 B1) and further in view of Yang et al. (US 6,975,738 B2).

Re claim 5, the audio system according to claim 4 with processing an audio channel with the switching amplifier, However, the combined teaching of Kemmerer et al. and Sato and Beer as a whole, fail to disclose of the specific wherein the amplifier processes at least two

channels of audio input. However, Yang et al. disclose of a system wherein the amplifier processes at least two channels of audio input (fig.5-6; col.2 line 40-49/stereophonic amplifier) for purpose of producing stereo signal output corresponding to channels signal. Thus, it would have been obvious for one of the art to have modified the combined prior arts with implementing the amplifier processes at least two channels of audio input for purpose of producing stereo signal output corresponding to channels signal.

Re claim 6, the audio system according to claim 5, further including an auxiliary control device, e.g. to control the audio output volume (Kemmerer, par [0009-0010]/remote control receiver may be used).

Re claim 7, the audio system according to claim 6, wherein the switching regulator and the switching amplifier are being housed (fig.1-2). However, the combined teaching of Kemmerer et al. and Sato and Beer and Yang et al. as a whole, failed to teach of the specific wherein the switching regulator and the switching amplifier are being housed in a single housing. But, it would have been obvious for one of the ordinary skills in the art to have tried in modifying the such switching regulator and switching amplifier as being housed in a certain housing with further implementing such adjustment wherein the switching regulator and the switching amplifier are being housed in a single housing with no unexpected result based on the obvious variation of engineering design for similarly adjustment various component functions.

5. Claims 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kemmerer et al. (US 2003/0123678 A1) and Sato (US 4,380,809) and Beer and further in view of Pearce et al. (US 5,973,368).

Re claim 3, the audio system according to claim 2 with the switching amplifier, However, the combined teaching of Kemmerer et al. and Sato and Beer as a whole, fail to disclose of the specific wherein the switching amplifier is a class D digital amplifier with associated H-bridge circuit on the output stage. But, Pearce et al. disclose of an audio amplifier wherein the switching amplifier is a class D digital amplifier with associated H-bridge circuit on the output stage (fig.1F-G; col.6 line 35-65; col.13 line 35-47) for purpose of driving the speaker with the low voltage audio signal. Thus, it would have been obvious for one of the ordinary skill in the art to have modified the prior art as combined with implementing the audio amplifier wherein the switching amplifier is a class D digital amplifier with associated H-bridge circuit on the output stage for purpose of driving the speaker with the low voltage audio signal.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DISLER PAUL whose telephone number is (571)270-1187. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chin Vivian can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/D. P./  
Examiner, Art Unit 2614

/Vivian Chin/  
Supervisory Patent Examiner, Art Unit 2614